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Retirement and Relief System*

[Additional counsel on signature page.]

UNITED STATES DISTRICT COURT

DISTRICT OF NEW JERSEY

CITY OF BIRMINGHAM RETIREMENT)	Civil Action No. _____
AND RELIEF SYSTEM, Derivatively on)	
Behalf of EXXON MOBIL CORPORATION,)	
)	
Plaintiff,)	
)	
v.)	VERIFIED STOCKHOLDER
)	DERIVATIVE COMPLAINT
REX W. TILLERSON, MARK W. ALBERS,)	
ANDREW P. SWIGER, DONALD D.)	
HUMPHREYS, MICHAEL J. DOLAN,)	
DARREN W. WOODS, and JACK P.)	
WILLIAMS,)	
)	
Defendants,)	JURY TRIAL DEMANDED
)	
– and –)	
)	
EXXON MOBIL CORPORATION,)	
)	
Nominal Defendant)	
_____)	

Plaintiff City of Birmingham Retirement and Relief System (“Birmingham” or “Plaintiff”), by and through its undersigned counsel, brings this action derivatively on behalf of Nominal Defendant Exxon Mobil Corporation (“Exxon” or the “Company”) against certain current members of Exxon’s board of directors (the “Board”) and executive officers, seeking to remedy breaches of fiduciary duties from at least the 1990s through the present (the “Relevant Period”). Plaintiff makes these allegations upon personal knowledge, as to the facts of its ownership of Exxon stock, and upon information and belief, as to all other matters, based upon an in-depth review of: (i) public filings made by Exxon and other related parties and non-parties with the U.S. Securities and Exchange Commission (“SEC”); (ii) press releases and other publications disseminated by the Company and other related non-parties; (iii) news articles, stockholder communications, and postings on Exxon’s website concerning the Company’s public statements; (iv) the proceedings in related civil lawsuits brought by the states of New York and Massachusetts, and a securities class actions brought by private parties, based on the same underlying misconduct; and (v) other publicly available information concerning Exxon and the Individual Defendants (defined below).

SUMMARY OF CLAIMS

1. Exxon is the world’s largest publicly traded oil and gas company. For decades, at the direction and because of the conscious disregard of the Individual

Defendants, Exxon misled shareholders about the material risks climate change posed and poses to its business in order to increase its short-term profits and falsely inflate its assets, revenues, and stock price.

2. For decades, Exxon knew that the burning of fossil fuels significantly increased risks relating to climate change, including through research the Company conducted and collected internally showing the devastating impacts of global warming: studies regarding the changes in sea levels and the melting of Arctic ice; measurements of the amounts of CO₂ in the atmosphere and its effect on global temperatures; and even computer-generated models extrapolating known trends. But, instead of disclosing these risks to shareholders, Exxon continued to mislead shareholders in order to maintain demand for its fossil fuels. Worse, Exxon committed to a campaign of disinformation, intentionally and falsely emphasizing the uncertainty of the known facts regarding climate change.

3. Exxon's deception surfaced not through the Company's own remedial efforts, but only through a series of exposés published in 2015. Once some of the information regarding Exxon's decades-long attempts to conceal and mislead shareholders surfaced, a coalition of 17 state attorneys general ("State AGs") headed by the states of New York and Massachusetts issued civil investigative demands and subpoenas to further investigate these matters. After a protracted legal battle that can only be described as a political effort by Exxon to avoid legal liability, the

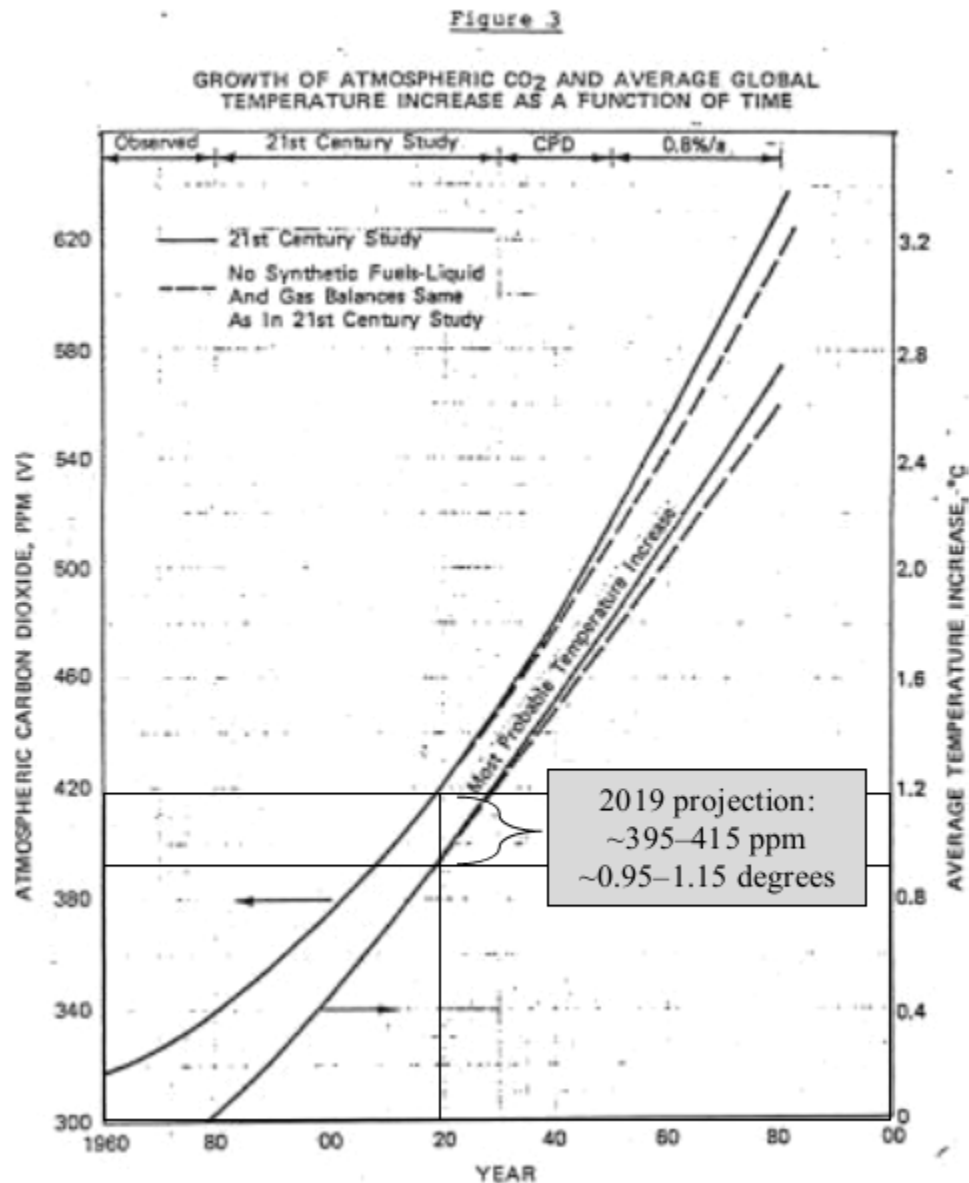
requests upon the Company from the State AGs were upheld as proper.¹ As a result of these baseless legal challenges, for more than three years, Exxon refused to comply with the State AGs' demands.

4. Regardless, the truth regarding Exxon's decades-long scheme to underplay the risk posed by climate change was eventually revealed through the investigation of the State AGs and through other documents made public by the media. Decades ago, Exxon completed sophisticated research into the issue of climate change in order to better understand the climate-related risks to its business. Exxon's scientific experts were among the earliest to understand the risks posed by increasing greenhouse gas emissions, and from the late 1970s onward, Exxon scientists and management knew that Exxon's oil, natural gas, and related hydrocarbon products were the leading cause of climate change. Exxon knew that climate change, if unabated, would have a potentially "catastrophic" impact – as one Exxon scientist called it in the 1970s.

5. Exxon predicted greenhouse gas emissions and their effect on average global temperature with incredible accuracy. For instance, a 1982 Exxon chart noted that atmospheric carbon dioxide (also referred to herein as "CO₂") would reach 415

¹ See *Exxon Mobil Corp. v. Schneiderman*, 316 F. Supp. 3d 679 (S.D.N.Y. 2018), *appeal pending sub nom. Exxon Mobil Corp. v. Healey*, No 18-1170 (2d Cir.); *Exxon Mobil Corp. v. Attorney Gen.*, 94 N.E.3d 786 (Mass. Super. Ct.), *cert. denied*, *Exxon Mobil Corp. v. Healey*, 139 S. Ct. 794 (2019).

parts per million in 2019 (the average was recently measured in May 2019 at 414.7 parts per million).



6. Exxon thus understood, in no later than 1982, that the acceleration of the concentration of CO₂ in the atmosphere would lead to a concomitant impact on global average temperatures, which would continue unless efforts to reduce CO₂

emissions were taken. Further, as early as 1978, Exxon confirmed that there was general scientific agreement that humanity was influencing global climate through the release of CO₂ as humans burned fossil fuels. In 1980, an expert retained by Exxon advised that global average temperatures would rise by 2.5 degrees Celsius (4.5 degrees Fahrenheit) by 2038, that such a change would have “major economic consequences,” and that such a change could “bring world economic growth to a halt.” Exxon understood that if actions to address climate change were delayed until the effects of climate change were discernable, then it was likely that such actions would occur too late to be effective.

7. Despite this knowledge, Exxon began a decades-long, intentionally misleading effort to deceive consumers regarding the climate change science by sowing doubt about the very science that Exxon had itself developed. By the late 1980s, Exxon made a strategic decision to emphasize uncertainty in climate science to deflect increasing regulatory and public pressure to reduce reliance on fossil fuels. Exxon spent millions of dollars on a public deception campaign, repeatedly running advertisements disguised as editorials, funding biased think tanks, and founding powerful lobbying groups to muddy the scientific waters with respect to climate change.

8. During this period, Exxon itself also made multiple statements to shareholders that sought to undermine climate science and which posed questions

that Exxon's own internal scientific knowledge had answered for decades. For example, a 1996 Exxon publication was entitled: "Global warming: who's right? Facts about a debate that's turned up more questions than answers." Exxon's own Chief Executive Officer ("CEO") at the time, Lee Raymond ("Raymond"), also repeatedly made representations that the science was uncertain as to whether humans were causing climate change.

9. To this day, Exxon has failed to disclose the catastrophic risk that climate change presents to its business. In financial disclosures Exxon is required to file with the SEC, despite decades of knowledge showing that burning fossil fuels is unsustainable and would cause climactic damage to the world economy, Exxon has failed to properly account for the extent of the risks climate change poses to the Company, the fossil fuel industry, and the global economy. Exxon purported to use a "proxy cost" to estimate the impact that climate change would have on its fossil fuel reserve assets, revenues, costs, and future earnings projections, but systematically revised this metric downward in spite of internal knowledge that the actual proxy cost numbers were much higher.

10. Additionally, Exxon has failed to disclose the risk that its fossil fuel business faces in the face of governmental and other measures that would limit greenhouse gas emissions, therefore reducing demand for its fossil fuel products. For instance, in order to achieve a non-catastrophic level of global warming,

estimates are that only roughly 20% of all accessible fossil fuel reserves may be harvested and burned. Exxon would thus need to declare a significant portion, if not a majority, of its booked fossil fuel reserves as “stranded” – or rendered economically incapable of being developed – in order to accurately be assessing that risk. Exxon failed to do so because, when those reserves cease to have future value, the writedown of the Company’s assets would cause the Company’s valuation to dramatically decrease.

11. Exxon’s deception has worked a further fraud in delaying efforts to combat climate change. For decades, Exxon has attempted to bury its own knowledge that burning fossil fuels would lead the Earth to the brink of catastrophe, and has undermined efforts to inform the public of the harm. For example, in a particularly egregious advertisement Exxon ran in 1997, titled “***Reset the Alarm,***” Exxon argued that “[t]he science of climate change is too uncertain to mandate a plan of action that could plunge economies into turmoil. ***We still don’t know what role man-made greenhouse gases might play in warming the planet.***” [Emphasis added.]

12. This public disinformation campaign was at odds with Exxon’s own climate scientists who worked at the Company from the late 1970s. As Ed Garvey, a former Exxon scientist, has stated: “[t]he issue was not were we going to have a problem. ***The issue was simply how soon and how fast and how bad it was going***

to be. Not if. Nobody at Exxon when I was there was discussing that.” [Emphasis added.]

13. Exxon’s current efforts to delay investigation by the State AGs, ignore shareholder demands to take action, and continue to pursue record levels of fossil fuel production and sales are simply an extension of the Company’s shortsighted and fraudulent conduct. Comprehensive equitable remedy in the form of governance reforms are required to prevent the existential harm the Individual Defendants have imposed on Exxon and the global economy and substantial monetary compensation must be attained for the Individual Defendants’ fraudulent misconduct and breaches of fiduciary duties to the Company.

JURISDICTION AND VENUE

14. This Court has jurisdiction over this action pursuant to 28 U.S.C. §1331 in that the complaint states a federal question: violations of §§10(b), 21D, and 29(b) of the Securities Exchange Act of 1934 (the “Exchange Act”). The Court has supplemental jurisdiction over the state law claims asserted herein pursuant to 28 U.S.C. §1367(a). This action is not a collusive action designed to confer jurisdiction on a court of the United States that it would not otherwise have.

15. This Court has jurisdiction over each of the Defendants (defined below) herein because each of them is either a corporation that conducts business in and maintains operations in this District or an individual who has sufficient minimum

contacts with this District to render the exercise of jurisdiction by this Court permissible under traditional notions of fair play and substantial justice.

16. Venue is proper in this Court in accordance with 28 U.S.C. §1391(a) because a substantial portion of the transactions and wrongs complained of herein occurred in this District, and the Defendants have received substantial compensation in this District by engaging in numerous activities that had an effect in this District.

PARTIES

A. Plaintiff

17. Plaintiff Birmingham is a stockholder of Exxon and has continuously held its shares at all times relevant hereto, will continue to hold Exxon shares throughout the pendency of this action, and will fairly and adequately represent the interests of other stockholders and the Company in enforcing its rights.

B. Nominal Defendant

18. Nominal Defendant Exxon is incorporated under the laws of the New Jersey, with its principal executive offices located in Irving, Texas. Exxon's common stock trades on the New York Stock Exchange ("NYSE") under the symbol "XOM."

C. Individual Defendants

19. Defendant Rex W. Tillerson ("Tillerson") served as Exxon's Chairman of the Board and CEO from 2006 to 2016. Tillerson retired from Exxon to serve as

Secretary of State under President Donald Trump from February 1, 2017 to March 31, 2018.

20. Defendant Mark W. Albers (“Albers”) served as an Exxon Senior Vice President (“SVP”) and a member of the Company’s Management Committee from 2007 until the date of his retirement, effective April 1, 2018.

21. Defendant Andrew P. Swiger (“Swiger”) has served as an Exxon SVP and its Principal Financial Officer (“PFO”) since 2013. Swiger also serves as a member of Exxon’s Management Committee. Swiger began working for the Company and has held progressively higher executive positions at Exxon since 1978.

22. Defendant Donald D. Humphreys (“Humphreys”) served as an Exxon SVP and its PFO until his retirement from the Company on February 1, 2013. Humphreys began work at the Company in 1978 and held positions at the highest level of the Company’s management since at least 1999, when he was named Vice President and Controller for Exxon.

23. Defendant Michael J. Dolan (“Dolan”) served as an Exxon SVP and a member of the Company’s Management Committee from 2008 until his retirement, effective August 1, 2018. Dolan started his career at Exxon in 1980 and began holding high-level managerial positions at the Company beginning in 1998, when he was named Vice President of Petrochemicals, America.

24. Defendant Darren W. Woods (“Woods”) has served as Exxon’s Chairman and CEO since January 1, 2017, and is also a member of the Company’s Management Committee. Prior to these positions, Woods served as Exxon’s President and as a member of the Board, since January 1, 2016. Woods joined Exxon in 1992 as a planning analyst and has served in various Vice President- and regional President-level positions from 2005 through 2016.

25. Defendant Jack P. Williams (“Williams”) has served as an Exxon SVP since 2014 and is a member of the Company’s Management Committee. Williams joined the Company in 1987 and has served in senior managerial positions at the Company since 1997.

26. Tillerson, Albers, Swiger, Humphreys, Dolan, Woods, and Williams are collectively referred to herein as the “Individual Defendants.”

27. Tillerson and Swiger are collectively referred to herein as the “Class Action Defendants.”

28. Exxon and the Individual Defendants are collectively referred to herein as the “Defendants.”

SUBSTANTIVE ALLEGATIONS

A. The Existential Threat of Climate Change

29. The five hottest years on record have all occurred since 2010; the ten warmest years occurred since 1998; and the 20 warmest years since 1995. Further, 2016 was the hottest year on record, followed by 2015, 2017, and 2018.

30. To date, global average air temperatures have risen approximately 1 degree Celsius (1.8 degrees Fahrenheit) above preindustrial temperatures due to human activity, including combustion of fossil fuels.

31. Between 1994 and the present, the Intergovernmental Panel on Climate Change (“IPCC”), the international body for assessing the science related to climate change, has presented reports to a United Nations governing body tasked with stabilizing the atmospheric concentration of greenhouse gases to prevent dangerous anthropogenic interference with the Earth’s climate. The IPCC was established to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.

32. The IPCC has concluded that the warming of the climate system is unequivocal and that since the 1950s, many of the changes observed are unprecedented over decades to millennia. The atmosphere and the oceans are warming, snow and ice cover is shrinking, and sea levels are rising. The IPCC has concluded that emissions of carbon dioxide from fossil fuel combustion and

industrial processes contributed about 78% of the total greenhouse gas emissions increase from 1970 to 2010.

33. Because burning fossil fuels is responsible for nearly four-fifths of the increase in greenhouse gas emissions over the past decades, efforts have been undertaken to estimate how much of the world's proven, economically recoverable fossil fuel reserves may be produced and burned while still staying on course to limit warming to safer levels. Those estimates of burnable reserves have declined over time: in the ten-year period from 2009 to 2019, estimates have declined precipitously from half of all recoverable reserves to about one-fifth of those reserves.

34. In 2014, the IPCC finalized its Fifth Assessment Report, which concluded, *inter alia*, that:

Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, can limit climate change risks.

* * *

Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally.

35. In October 2018, the IPCC issued a gravely urgent report that concluded, with a high degree of scientific confidence, that if the current pace of

emissions continues, warming will reach 1.5 degrees Celsius (2.7 degrees Fahrenheit) above pre-industrial levels between 2030 and 2052. The IPCC stressed that warming above that level brings significantly increased risk for all relevant parameters – including human health, food security, economic productivity, water supply, national security, adaptation needs, drought, sea level rise, biodiversity, species loss and extinction, ecosystem impacts, and ocean temperature and acidity.

36. The October 2018 IPCC report was unequivocal in its conclusion that the world must reduce global carbon dioxide emissions dramatically well before 2030 if we are to maintain temperature increase below 1.5 degrees Celsius (2.7 degrees Fahrenheit). In this regard, the October 2018 IPCC report concluded that to have an even chance of meeting the 1.5 degrees Celsius target, the world can emit no more than an additional 158 gigatons of carbon, which is equivalent to about 20% of the world's known fossil fuel reserves.

37. Any production from new oil and gas fields, other than those already in production or under development, is not compatible with a 1.5 degrees Celsius target. As a result, all of the \$4.9 trillion in forecasted capital expenditures for new oil and gas fields industry-wide is incompatible with the goal of limiting warming to 1.5 degrees Celsius.

38. On November 23, 2018, the 13 federal agencies that comprise the U.S. Global Change Research Program issued Volume II of the Fourth National Climate

Assessment (the “Assessment”). The Assessment concluded that “[t]he impacts of climate change are already being felt in communities across the country.” With respect to economic impacts in the United States, the Assessment warned that “rising temperatures, sea level rise, and changes in extreme events are expected to increasingly disrupt and damage critical infrastructure and property, labor productivity, and the vitality of our communities.”

39. As a result of these impacts, and with continued growth in greenhouse gas emissions, the Assessment concluded that “annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product (GDP) of many U.S. states” – or in the worst-case scenario, more than 10% of gross domestic product in the United States as a whole. Such U.S. economic losses would be severe: serious declines in U.S. crop production; decreased dairy production; losses to the shellfish industry due to ocean acidification; an estimated loss of a half-billion labor hours in the Southeast by that time, due to extremely hot temperatures; and at least \$1 trillion in U.S. coastal real estate at risk.

40. Globally, credible recent estimates of future climate-related costs are overwhelming. Valuations of the risks climate change poses to manageable assets worldwide (*i.e.*, those held outside banks) range from \$4.2 to \$43.0 trillion in net

present value terms, which is up to 30% of the value of global manageable assets today.

41. In the IPCC's high-emission scenario, according to another peer-reviewed estimate, climate change will reduce global economic output by 23% by the end of this century. Near the equator, in countries, like India, where Exxon confidently projects massive new demand for fossil fuels, the projected impacts are effectively cataclysmic: in India, *a 92% reduction* in economic output from climate change is expected.

42. The largest source of U.S. anthropogenic greenhouse gas emissions is fossil fuel combustion. In 2016, fossil fuel combustion accounted for 76% of U.S. greenhouse gas emissions, and in 2017, nearly half of U.S. energy-related carbon dioxide emissions (by far the dominant contributor to overall greenhouse gas emissions) came from combustion of petroleum products, such as those marketed and sold by Exxon.

43. As Exxon has known for decades, the use of fossil fuels is the single most important cause of global warming. If humanity is to avoid dangerous levels of global warming, the use of fossil fuels – including the majority of the world's proven, economically recoverable fossil fuel reserves – must remain unburned.

B. A Series of Exposés Reveal Exxon Internally Knew of Global Warming and Melting Arctic Ice

44. In late 2015, climate journalists who had reviewed internal Exxon documents confirmed that Exxon had known for decades that fossil fuels caused climate change, but decided to conceal this information and block efforts to curb climate change. This knowledge extended to the highest levels of the Company's management and members of the Company's Board.

45. Beginning in September 2015, climate journalists at *InsideClimate News* began publishing the results of an in-depth, eight-month investigation into the history of Exxon's climate change research in a series of news articles published to its website.² The first of these articles is an executive summary of a six-part exposé, titled "Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago" (the "September 15 ICN Article"), which reads, in relevant part:

Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago

Top executives were warned of possible catastrophe from greenhouse effect, then led efforts to block solutions.

At a meeting in Exxon Corporation's headquarters, a senior company scientist named James F. Black addressed an audience of powerful oilmen. Speaking without a text as he flipped through detailed slides, Black delivered a sobering message: carbon dioxide from the world's

² Neela Banerjee, Lisa Song, and David Hasemyer, *Exxon: The Road Not Taken*, INSIDE CLIMATE NEWS (Sept. 16, 2015), <https://insideclimatenews.org/content/Exxon-The-Road-Not-Taken>.

use of fossil fuels would warm the planet and could eventually endanger humanity.

“In the first place, there is general scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels,” Black told Exxon’s Management Committee, according to a written version he recorded later.

It was July 1977 when Exxon’s leaders received this blunt assessment, well before most of the world had heard of the looming climate crisis.

* * *

Exxon responded swiftly. Within months the company launched its own extraordinary research into carbon dioxide from fossil fuels and its impact on the earth. Exxon’s ambitious program included both empirical CO₂ sampling and rigorous climate modeling. It assembled a brain trust that would spend more than a decade deepening the company’s understanding of an environmental problem that posed an existential threat to the oil business.

Then, toward the end of the 1980s, Exxon curtailed its carbon dioxide research. In the decades that followed, Exxon worked instead at the forefront of climate denial. It put its muscle behind efforts to manufacture doubt about the reality of global warming its own scientists had once confirmed. It lobbied to block federal and international action to control greenhouse gas emissions. It helped to erect a vast edifice of misinformation that stands to this day.

This untold chapter in Exxon’s history, when one of the world’s largest energy companies worked to understand the damage caused by fossil fuels, stems from an eight-month investigation by InsideClimate News. ICN’s reporters interviewed former Exxon employees, scientists, and federal officials, and consulted hundreds of pages of internal Exxon documents, many of them written between 1977 and 1986, during the heyday of Exxon’s innovative climate research program. ICN combed through thousands of documents from archives including those held at the University of Texas-Austin, the Massachusetts Institute of

Technology and the American Association for the Advancement of Science.

[Emphasis added.]

46. The September 15 ICN Article continues, detailing projects sponsored by Exxon to understand global warming and culminating in a 1982 corporate primer (the “1982 Primer”) on the subject widely distributed to the Company’s management. For example, Exxon sponsored a project to sample carbon dioxide in the air along pacific trade routes and continued efforts into the 1980s to model the climate’s sensitivity to the buildup of carbon dioxide in the air. Exxon employees further detailed Exxon’s attempts in the late 1970s to commit itself to ““scientific, fact-based analysis of this important issue[,]”” including efforts to measure how quickly the Earth’s deep oceans could absorb atmospheric CO₂ and develop rigorous climate models through the use of computer simulations, providing the scientific basis for the eventual 1982 Primer on carbon dioxide and climate change prepared by Exxon’s own environmental affairs office.

47. The 1982 Primer recognized that heading off global warming ““would require major reductions in fossil fuel combustion[,]”” was marked ““not to be distributed externally,”” and “contained information that ‘[was] given wide circulation to Exxon management.”” The 1982 Primer further recognized “that *heading off global warming ‘would require major reductions in fossil fuel combustion’*” because “[u]nless that happened, *‘there are some potentially*

catastrophic events that must be considered[.]’” [Emphasis added.] The September 15 ICN Article also notes that despite uncertainties surrounding aspects of climate science, Exxon’s researchers noted ““a clear scientific consensus ha[d] emerged”” regarding global warming by September 1982.

48. However, after these initial efforts to obtain a clear picture of climate change through unbiased science, the September 15 ICN Article notes that Exxon took a sharp about-face throughout the 1980s. Exxon, at the time, was developing enormous gas fields off the coast of Indonesia and in the process of researching synthetic oil made from coal, tar sands, and oil shales that significantly boosted CO₂ emissions. By 1988, Exxon had begun financing efforts to amplify doubt about the state of climate science. Exxon helped found and lead the Global Climate Coalition, an alliance of some of the world’s largest companies seeking to halt government efforts to curb fossil fuel emissions. Exxon used the American Petroleum Institute, right-wing think tanks, campaign contributions, and its own lobbying to push a narrative that climate science was too uncertain to necessitate cuts in fossil fuel emissions.

49. Exxon’s efforts to cast doubt on climate change continued into the 1990s and beyond. As reported in the September 15 ICN Article, in 1997, Exxon’s then-CEO Raymond stated that ““there’s a lot we really don’t know about how climate will change in the 21st century and beyond,”” arguing that policies curbing

emissions should be pushed back, as “[i]t is highly unlikely that the temperature in the middle of the next century will be significantly affected whether policies are enacted now or 20 years from now.” Exxon’s scientists followed Raymond’s line, publishing views that ran contrary to the scientific mainstream and which were characterized in 2006 by the United Kingdom’s science academy as “inaccurate and misleading” on the question of climate uncertainty.

50. A subsequent *InsideClimate News* article, published on October 22, 2015, and entitled “Exxon Sowed Doubt About Climate Science for Decades by Stressing Uncertainty” (the “October 22 ICN Article”), further detailed Exxon’s efforts to muddle the science of climate change, push uncertainty, and influence public policy in the United States and abroad in the 1990s and beyond. The October 22 ICN Article states, regarding Exxon’s efforts in the 1990s:

Drilling for Uncertainty

The IPCC published its first report in 1990. Despite the scientific gaps, the panel warned that unrestrained emissions from burning fossil fuels would surely warm the planet in the century ahead. The conclusion, the IPCC said after intense deliberations, was “certain.” It prescribed deep reductions in greenhouse gas emissions to stave off a crisis in the coming decades.

At this crucial juncture, Exxon pivoted toward uncertainty and away from the global scientific consensus.

At the IPCC’s final session to draft its summary for policymakers, Exxon’s [Brian] Flannery [one of Exxon’s top climate modelers] was in the room as an observer. He took the microphone to challenge both the certainty and the remedy. None of the other scientists agreed with

Flannery, and the IPCC brushed off Exxon's advice to water down the report, according to Jeremy Leggett's eyewitness account in his book, *The Carbon War*.

At a conference in June 1991, [Michael] MacCracken [a leading government scientist on climate change] joined a panel chaired by Flannery to work together on a climate change project involving geo-engineering.

The contact, according to MacCracken, led to an unexpected solicitation from the oil lobby in Washington. Will Ollison, a science adviser at the American Petroleum Institute, in a fax marked urgent, asked MacCracken, then at the Lawrence Livermore National Laboratory, to write a paper highlighting the scientific uncertainties surrounding global warming.

The API, where Exxon held enormous sway, wanted him to write up the complex nuances in plain English – with an emphasis on the unknown, not the known.

* * *

Flannery, for his part, continued to emphasize uncertainty. And so did Exxon's new chairman and chief executive, Lee Raymond, who spoke of it repeatedly in public.

"Currently, the scientific evidence is inconclusive as to whether human activities are having a significant effect on the global climate," Raymond claimed in a speech delivered in 1996 to the Economic Club of Detroit.

"Many people, politicians and the public alike, believe that global warming is a rock-solid certainty," he said the next year in a speech in Beijing. "But it's not."

Addressing the World Petroleum Congress, which was meeting just before the conclusion of the Kyoto Protocol negotiations, Raymond even disputed that the planet was warming at all. "The earth is cooler today than it was 20 years ago," he said.

That was false. Authoritative climate agencies declared 1997 the warmest year ever measured. Decade by decade, the warming has continued, in line with the climate models.

But Raymond, turning his back on Exxon researchers and their state-of-the-art work, mocked those climate models.

“1990’s models were predicting temperature increases of two to five degrees Celsius by the year 2100. Last year’s models say one to three degrees. Where to next year?”

“It is highly unlikely,” he said, “that the temperature in the middle of the next century will be significantly affected whether policies are enacted now or 20 years from now.”

The Doubt Industry

Exxon and its allies had been working hard to spread this dilatory message.

First, they set up the Global Climate Coalition (GCC), a lobbying partnership of leading oil and automobile companies dedicated to defeating controls on carbon pollution.

“As major corporations with a high level of internal scientific and technical expertise, they were aware of and in a position to understand the available scientific data,” recounts an essay on corporate responsibility for climate change published last month in the peer-reviewed journal *Climatic Change*.

“From 1989 to 2002, the GCC led an aggressive lobbying and advertising campaign aimed at achieving these goals by sowing doubt about the integrity of the IPCC and the scientific evidence that heat-trapping emissions from burning fossil fuels drive global warming,” says the article, by Harvard climate science historian Naomi Oreskes and two co-authors.

* * *

Then, in 1998 Exxon also helped create the Global Climate Science Team, an effort involving Randy Randol, the company's top lobbyist, and Joe Walker, a public relations representative for API.

Their memo, leaked to The New York Times, asserted that it is "not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it." Opponents of the Kyoto treaty, it complained, "have done little to build a case against precipitous action on climate change based on the scientific uncertainty."

The memo declared: "Victory will be achieved when average citizens 'understand' (recognize) uncertainties in climate science," and when "recognition of uncertainty becomes part of the 'conventional wisdom.'"

[Emphasis added and in original.]

51. The October 22 ICN Article also detailed Exxon's intensified efforts to push uncertainty regarding climate change at the turn of the century through 2015, as Exxon became cozy with the Bush administration and its lobbying activity:

[T]he clashes continued between the scientific establishment and Exxon's purveyors of uncertainty.

The Royal Society of the United Kingdom, for centuries a renowned arbiter of science, harshly criticized Exxon in 2006 for publishing "very misleading" statements about the IPCC's Third Assessment Report. The IPCC found that most of the observed warming of the planet in the late 20th century was probably caused by humans.

The Society's communications manager Bob Ward reminded Exxon pointedly that one of its own scientists had contributed to the IPCC chapter in question.

The Royal Society said it had no problem with Exxon funding scientific research, but "we do have concerns about ExxonMobil's funding of lobby groups that seek to misrepresent the scientific evidence relating to climate change."

Ward said Exxon was funding at least 39 organizations “featuring information on their websites that misrepresented the science on climate change, by outright denial of the evidence that greenhouse gases are driving climate change, or by overstating the amount and significance of uncertainty in knowledge.”

* * *

Exxon’s uncertainty campaign was detailed in three exhaustive reports published in 2007 by the Union of Concerned Scientists and the Government Accountability Project.

At a Congressional hearing in 2007, Harvard scientist James McCarthy, who was a member of the UCS board and the newly elected president of the American Association for the Advancement of Science, declared: “The Bush administration and a network of Exxon-funded, ExxonMobil funded organizations have sought to distort, manipulate and suppress climate science so as to confuse the American public about the urgency of the global warming problem, and thus, forestall a strong policy response.”

To this day, top Exxon officials sometimes argue that models are no basis for policy.

While Rex Tillerson, the current chairman, doesn’t echo Lee Raymond’s science denial in his formal speeches, he sometimes backslides when speaking off the cuff.

At Exxon’s annual meeting in 2015, Tillerson said it would be best to wait for more solid science before acting on climate change. “What if everything we do, it turns out our models are lousy, and we don’t get the effects we predict?” he asked.

[Emphasis added.]

52. At roughly the same time as *InsideClimate News* published the final articles of its Exxon exposé, an independent study confirmed that Exxon and its worldwide affiliates crafted a public policy position that sought to downplay the

certainty of global warming, while in possession of information collected and analyzed by researchers and engineers directly contradicting that position. Specifically, Exxon had modeled how the Arctic would respond to increased carbon dioxide in the atmosphere, finding that the burning of fossil fuels would lead to widespread losses in sea ice. As *The Los Angeles Times* described in an October 9, 2015, article, titled “What Exxon knew about the Earth’s melting Arctic”:

The gulf between Exxon’s internal and external approach to climate change from the 1980s through the early 2000s was evident in a review of hundreds of internal documents, decades of peer-reviewed published material and dozens of interviews conducted by Columbia University’s Energy & Environmental Reporting Project and the Los Angeles Times.

* * *

Since the late 1970s and into the 1980s, Exxon had been at the forefront of climate change research, funding its own internal science as well as research from outside experts at Columbia University and MIT.

With company support, [Ken] Croasdale [senior ice researcher for Exxon’s Canadian subsidiary] spearheaded the company’s efforts to understand climate change’s effects on its Arctic operations. A company such as Exxon, he said, “should be a little bit ahead of the game trying to figure out what it was all about.”

Exxon Mobil describes its efforts in those years as standard operating procedure. “Our researchers considered a wide range of potential scenarios, of which potential climate change impacts such as rising sea levels was just one,” said Alan Jeffers, a spokesman for Exxon Mobil.

The Arctic seemed an obvious region to study, Croasdale and other experts said, because it was likely to be most affected by global warming.

That reasoning was backed by models built by Exxon scientists, including Flannery, as well as Marty Hoffert, a New York University physicist. Their work, published in 1984, showed that global warming would be most pronounced near the poles.

Between 1986, when Croasdale took the reins of Imperial's frontier research team, until 1992, when he left the company, his team of engineers and scientists used the global circulation models developed by the Canadian Climate Centre and NASA's Goddard Institute for Space Studies to anticipate how climate change could affect a variety of operations in the Arctic.

These were the same models that – for the next two decades – Exxon's executives publicly dismissed as unreliable and based on uncertain science. As Chief Executive Lee Raymond explained at an annual meeting in 1999, future climate “projections are based on completely unproven climate models, or, more often, on sheer speculation.”

One of the first areas the company looked at was how the Beaufort Sea could respond to a doubling of carbon dioxide in the atmosphere, which the models predicted would happen by 2050.

* * *

Exxon Mobil declined to respond to requests for comment on what steps it took as a result of its scientists' warnings. According to Flannery, the company's in-house climate expert, much of the work of shoring up support for the infrastructure was done as routine maintenance.

“You build it into your ongoing system and it becomes a part of what you do,” he said.

Today, as Exxon's scientists predicted 25 years ago, Canada's Northwest Territories has experienced some of the most dramatic effects of global warming. While the rest of the planet has seen an average increase of roughly 1.5 degrees in the last 100 years, the northern reaches of the province have warmed by 5.4 degrees and temperatures in central regions have increased by 3.6 degrees.

[Emphasis added.]

C. Exxon Pursues an Extensive Climate Denial Campaign Despite Extensive Internal Scientific Knowledge to the Contrary

53. As the scientific consensus on climate change emerged and strengthened, Exxon attacked the consensus and exaggerated the uncertainties in order to undermine support for action. Researchers from Harvard University, the University of Bristol, and George Mason University, working in tandem to review internal Exxon corporate documents, concluded that the fossil fuel industry, including Exxon, has subjected the American public to a “well-funded, well-orchestrated disinformation campaign about the reality and severity of human-caused climate change.”³ The researchers published the contents of internal Exxon memos from 1988, 1989, and 1998 to show how Exxon’s public relations strategy evolved into a disinformation campaign:

³ John Cook, et al., *America Misled: How the fossil fuel industry deliberately misled Americans about climate change*, GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM’N (Oct. 2019), https://www.climatechangecommunication.org/wp-content/uploads/2019/10/America_Misled.pdf.

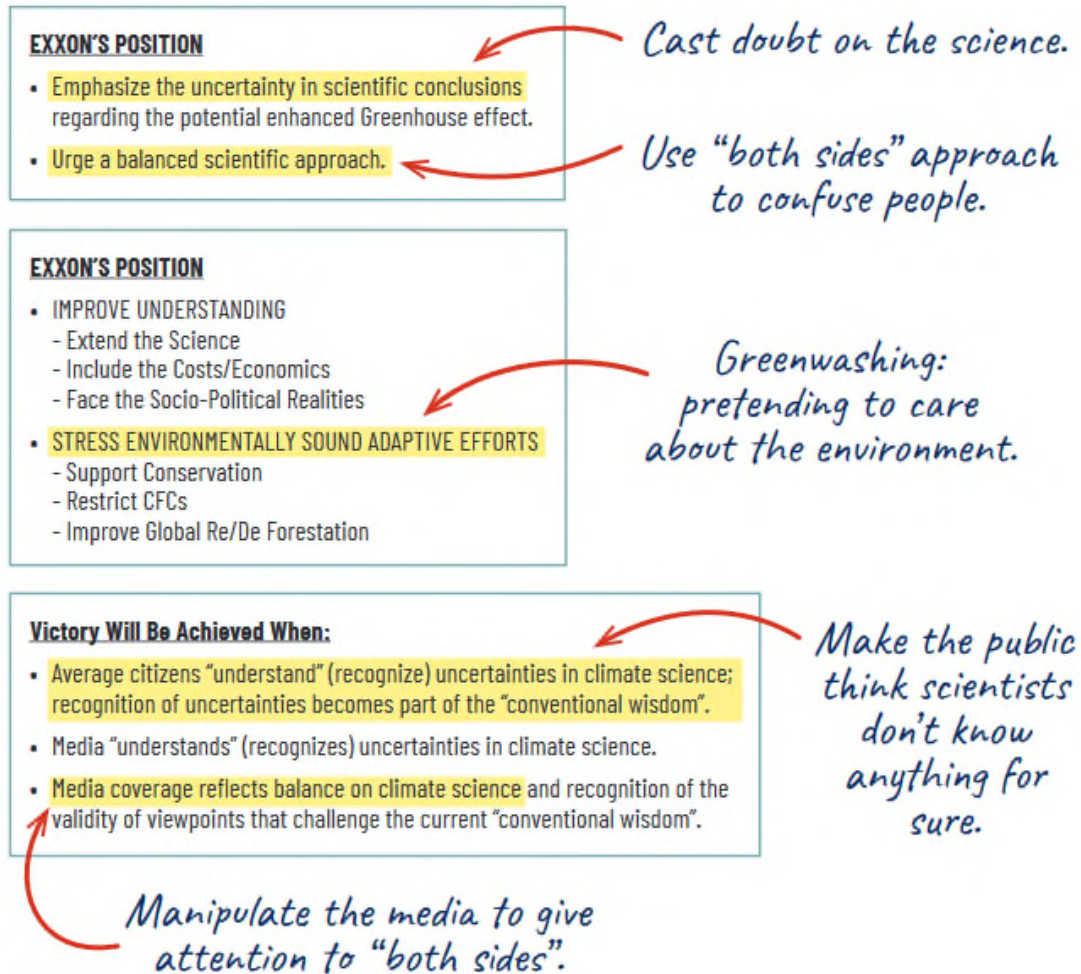


Figure 3: Top: Exxon 1988 internal memo. Middle: Exxon 1989 internal memo. Bottom: Exxon et al. 1998 internal memo. Fossil fuel industry documents show that they devised public relations strategies to promote doubt about climate science in the 1980s-90s.

54. This internal policy to spread disinformation and create uncertainty in the American public was effectively carried out by the Company. For example, an Exxon advertisement published in *The New York Times* in March 2000, entitled "Unsettled Science," reads as follows:

Knowing that weather forecasts are reliable for a few days at best, we should recognize the enormous challenge facing scientists seeking to

protect climate change and its impact over the next century. In spite of everyone's desire for clear answers, it is not surprising that fundamental gaps in knowledge leave scientists unable to make reliable predictions about future changes.

A recent report from the National Research Council (NRC) raises important issues, including these still-unanswered questions (1) Has human activity already begun to change temperature and the climate, and (2) How significant will future change be?

The NRC report confirms that Earth's surface temperature has risen by about 1 degree Fahrenheit over the past 150 years. Some use this result to claim that humans are causing global warming, and they point to storms or floods to say that dangerous impacts are already under way. Yet scientists remain unable to confirm either connection.

Geological evidence indicates that climate and greenhouse gas levels experience significant natural variability for reasons having nothing to do with human activity. Historical records and current scientific evidence show that Europe and North America experienced a *medieval warm period* one thousand years ago, followed centuries later by a *little ice age*. The geological record shows even larger changes throughout Earth's history. *Against this backdrop of large poorly understood natural variability, it is impossible for scientists to attribute the recent small surface temperature increase to human causes.*

Moreover, computer models relied upon by climate scientists predict that lower atmospheric temperatures will rise as fast as or faster than temperatures at the surface. However, only within the last 20 years have reliable global measurements of temperatures in the lower atmosphere been available through the use of satellite technology. These measurements show little if any warming.

Even less is known about the potential positive or negative impacts of climate change. In fact, many studies and field experiments have demonstrated that increased levels of carbon dioxide can promote crop and forest growth.

So, while some argue that the science debate is settled and governments should focus only on near-term policies—that is empty rhetoric. Inevitably, future scientific research will help us understand

how human actions and natural climate change may affect the world and will help determine what actions may be desirable to address the long-term.

Science has given us enough information to know that climate changes may pose long-term risks. Natural variability and human activity may lead to climate change that could be significant and perhaps both positive and negative. Consequently, people, companies and governments should take responsible actions now to address the issue.

One essential step is to encourage development of lower-emission technologies to meet our future needs for energy. We'll next look at the promise of technology and what is being done today.

[Emphasis added and in original.]

55. Through editorial-style advertisements, such as the foregoing “advertorial,” Exxon cast doubt on the scientific consensus regarding man-made climate change, measurable changes in surface temperatures, computer models relied upon to predict future climate change, and even whether climate change would have a negative impact – despite the research conducted, consensus formed, and internal knowledge disseminated by the Company’s own scientists to the contrary. As independently verified in a study conducted by Harvard University researchers, including an empirical document-by-document textual content analysis and comparison of 187 climate change communications from Exxon, “[w]e conclude that Exxon[] contributed to advancing climate science—by way of its scientists’ academic publications—but promoted doubt about it in advertorials. *Given this*

discrepancy, we conclude that Exxon[] misled the public.”⁴ [Emphasis added.]

Documents available to the researches showed a systemic, quantifiable discrepancy between what Exxon’s scientists and executives discussed about climate change in private and academic circles, and what the Company presented to the general public.

56. Exxon published additional advertorials repeatedly emphasizing a narrative of scientific uncertainty that Exxon knew to be false through the late 1990s and as late as 2004. These advertorials stated, *inter alia*:

- “[t]he science of climate change is too uncertain to mandate a plan of action” (“*Reset the Alarm*”);
- “[w]e don’t know enough about the factors that affect global warming and the degree to which—if any—that man-made emissions (namely, carbon dioxide) contribute to increases in Earth’s temperature” (“*Climate change: a prudent approach*”);
- “climatologists are still uncertain how—or even if—the buildup of man-made greenhouse gases is linked to global warming” (“*Climate change: where we come out*”);
- “there is a high degree of uncertainty over timing and magnitude of the potential impacts that man-made emissions of greenhouse gases have on climate” (“*Climate change: a degree of uncertainty*”); and
- “scientific uncertainties continue to limit our ability to make objective, quantitative determinations regarding the human role in recent climate change or the degree and consequences of future change.” (“*Weather and climate*”).

⁴ Geoffrey Supran and Namoi Oreskes, *Assessing ExxonMobil’s Climate Change Communications*, ENVIRON. RES. LETTERS (2017), <https://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf>.

57. Exxon continued its campaign to downplay and obscure the risks posed by climate change through the 2000s and 2010s, through direct statements, statements made through proxies, and other indirect means.

58. For instance, the Royal Society of London for Improving Natural Knowledge (the “Royal Society”), the independent scientific academy of the United Kingdom and oldest scientific academy in continuous existence in the world, revealed in a September 2006 public letter to Exxon that the Company had funded 39 groups in the United States to spread doubt and confuse the public about the science of climate change. The Royal Society letter also documented that Exxon had spent more than \$2.9 million in 2005 alone to fund these groups.

59. The Royal Society expressed concern “about the support that Exxon[] has been giving to organisations that have been misinforming the public about the science of climate change.” The Royal Society also criticized the Company for making misleading statements in its Corporate Citizenship Report that warming observations are based on expert judgment rather than objective statistical methods. The Royal Society pointed out that statements from Exxon’s documents “are not consistent with the scientific literature that has been published on this issue” and documented that Exxon’s public statements regarding the uncertainty of climate science were contradicted by research conducted by Exxon’s own scientists.

60. Until at least 2009, Exxon also funded fringe research without any significant support in the scientific community to cast doubt on the role of fossil fuels in causing climate change. For example, Exxon funded research by Wei-Hock Soon (“Soon”), a part-time employee of the Harvard-Smithsonian Center for Astrophysics, who holds a degree in aerospace engineering and claimed variations in the sun’s energy was the primary cause of recent global warming, not human activity, including the combustion of fossil fuels. Soon presented his conclusions to Congress, state legislatures, and the media in a manner that was intended to reach the general public. According to media reports, Soon accepted over a million dollars from Exxon and other companies in the fossil fuel industry, and he failed to disclose that conflict of interest in his published scientific research papers. In correspondence with his patrons, Soon described many of his scientific papers as “deliverables” he completed in exchange for their payments.

61. Exxon’s disinformation campaign is also confirmed by the 2007 testimony of Harvard University’s Dr. James McCarthy (“McCarthy”) to a subcommittee of the U.S. House of Representatives’ Committee on Science and Technology. McCarthy noted that Exxon had funded a network of 43 organizations “to distort, manipulate and suppress climate science, so as to confuse the American public about the reality and urgency of the global warming problem, and thus forestall a strong policy response.” Its funding of such groups that deny and

downplay climate change, including funding of the American Council on Science and Health, continues to this day.

62. Exxon’s own senior executives also continue to downplay the risks that adhere to climate change as well. For example, in a June 2012 speech to the Council on Foreign Relations, Exxon’s then-CEO Tillerson told his audience, comprised of investment professionals and journalists, among others, that there are “much more pressing priorities” than climate change and that climate change is an “engineering problem, and it has engineering solutions.” Tillerson also represented at Exxon’s 2015 annual shareholders meeting that “we don’t really know what the climate effects of 600 ppm [parts per million of carbon dioxide] versus 450 ppm will be, because the [climate] models simply are not that good.”

D. State Attorneys General and Private Parties File Claims Against the Company for Its Climate Change Deception

63. In March 2016, the coalition of 17 State AGs pledged to hold fossil fuel companies accountable for their conduct involving climate change. Despite attempts by Exxon to quash, block, and otherwise delay the subpoenas issued by the State AGs in pursuit of this goal, the State AG claims have proceeded, resulting in two lawsuits filed against the Company: (1) *Commonwealth of Mass. v. Exxon Mobil Corp.*, No. 1984CV03333 (Mass. Super. Ct., Suffolk Cty. Oct. 24, 2019) (“MassAG Complaint”); and (2) *People of the State of N.Y. v. Exxon Mobile Corp.*, Index No.

452044/2018 (N.Y. Sup. Ct., N.Y. Cty. Oct. 24, 2018) (“NYAG Complaint” and collectively, “State AG Complaints”).

The NYAG Complaint

64. As both of the State AG Complaints allege, Exxon’s misrepresentations worked a fraud on and otherwise deceived Exxon shareholders. The NYAG Complaint, alleging that Exxon had committed securities fraud, focused on three categories of deceptive representations from the Company.

65. **First.** The first category of misrepresentations the NYAG Complaint alleges relates to Exxon’s use of a “proxy cost” in its cost projections. The NYAG Complaint alleges that Exxon repeatedly and falsely assured investors that it has taken active and consistent steps to protect the Company’s value from the risk that climate change regulation poses to its business. Exxon touted as a key safeguard its application of a “proxy cost” to represent the costs of greenhouse gas emissions in its long-term projections for purposes of business planning, investment decision-making, and financial reporting. The proxy cost is a cost that is included in economic projections as a proxy, or stand-in, for the likely effects of expected future events.

66. Exxon falsely represented that it applied escalating proxy costs of greenhouse gas emissions in its economic projections as a proxy for increasing regulatory costs resulting from the increasingly stringent climate regulations that it

expected. Exxon further represented that it used a specific set of proxy costs across all business units and that it had been applying these proxy costs since 2007.

67. The NYAG Complaint alleges that Exxon's statements were materially false and misleading and that Exxon frequently deviated from its public representations by: (i) applying a lower, undisclosed proxy cost based on internal guidance; (ii) applying even lower costs based on existing regulations and holding those costs flat for decades into the future, in lieu of applying an escalating proxy cost; and (iii) applying no cost associated with greenhouse gas emissions at all.

68. These misrepresentations were substantial – had Exxon applied its proxy costs in the manner it publicly represented, it would have projected billions of dollars of additional greenhouse gas-related costs and would have projected total greenhouse gas-related costs of over \$7 billion in 2040 alone. But, because it did not incorporate such costs in its investment decision-making, business planning, and financial reporting in the manner it represented, Exxon's financial vulnerability to climate change regulation was significantly understated and greater in reality than it led investors to believe.

69. **Second.** Exxon also did not apply a proxy cost for greenhouse gas emissions, as it represented in projecting oil and gas demand, oil and gas prices, or the Company's revenues. One aspect of Exxon's business decisions, planning, and reporting is the projection of its revenues, which are influenced by the Company's

expectations as to future oil and gas prices. Because future climate policies may influence demand for oil and gas, which affects oil and gas prices, Exxon represented that it applied a proxy cost of greenhouse gas emissions in estimating demand, just as it represented that it had applied a proxy for its own costs. For example, then-CEO Tillerson told research analysts that the Company's "demand projections anticipate government policies will impose rising costs on carbon dioxide emissions."

70. As the NYAG Complaint alleges, however, Exxon's actual application of proxy costs to its demand, price, and revenue projections deviated from the Company's representations in two important ways: (i) contrary to its representations, Exxon did not apply its proxy cost in estimating demand in the transportation sector; and (ii) the projected oil and gas prices that Exxon applied in its economic models were set with little reference to the Company's demand analysis. As a result, Exxon's publicly represented proxy costs did not meaningfully influence its revenue projections, rendering the Company's proxy cost-related representations misleading.

71. **Third.** The final category of fraudulent representations alleged in the NYAG Complaint regards Exxon's conclusion that it was "confident that none of [its] hydrocarbon reserves are now or will become 'stranded'" and that it "does not believe current investments in new reserves are exposed to the risk of stranded assets." Exxon's representation that it was not subject to stranded asset risk – and

would not need to abandon its hydrocarbon assets – was a purported analysis it had conducted showing that governments would not impose more stringent climate regulations, as distributed repeatedly to investors.

72. The purported analysis is alleged to be materially misleading because it referred to a “two degree” scenario and purported to show that governments would not impose more stringent climate regulations to achieve the scenario. The “two degree” scenario refers to a scenario in which deep cuts in global greenhouse gas emissions are achieved to limit the increase in global temperatures to below two degrees Celsius above pre-industrial levels. The exploitation of much of the world’s remaining fossil fuel reserves is widely thought to be inconsistent with achieving the two degree scenario. According to experts, only 20% of fossil fuel reserves of oil, gas, and coal could be used, while the remaining 80% of fossil fuel reserves would be subject to impairment and stranded.

73. Despite investors’ and regulators’ concerns, Exxon concluded that a “two degree” scenario is “highly unlikely” to occur because such a scenario would impose enormous CO₂ costs on consumers, and Exxon therefore does not face a risk of its assets becoming stranded. This conclusion, according to the NYAG Complaint, rested upon a deeply misleading analysis that was purportedly supported by government and academic data, when, in fact, it was not.

The MassAG Complaint

74. The MassAG Complaint alleges further deceptive disclosures from Exxon to its shareholders. In addition to echoing the NYAG Complaint regarding Exxon's fraudulent representations regarding the use of "proxy costs" to account for assets and risks related to its business, the MassAG Complaint also asserts a swathe of claims against Exxon for failing to adequately inform shareholders regarding the material risk that climate change posed to its business more broadly.

75. The MassAG Complaint specifically alleges that Exxon employed a broad strategy of deceptive communications in its climate risk disclosures in asserting that Exxon has accounted for, and is responsibly managing, climate change risks and that in any event, they pose no meaningful threat to the Company's business model, its assets, or the value of its securities. The MassAG Complaint identifies these communications as deceptive because they "deny or ignore the numerous systemic risks that climate change presents to the global economy, the world's financial markets, the fossil fuel industry, and ultimately Exxon[]'s own business[.]"

76. According to the MassAG Complaint, Exxon has never publicly acknowledged or accounted for the way these systemic risks would affect its business, the fossil fuel industry generally, the world's financial markets, or the global economy on which Exxon's projections of ever-increasing fossil fuel demand

rest. Citing to Exxon's long history of researching and obtaining, then publicly denying, the knowledge it attained from climate change science, the MassAG Complaint alleges that Exxon's climate risk disclosures have obscured and had the effect of worsening the systemic risks identified by regulators to the world's financial system.

77. The MassAG Complaint notes that Exxon's affirmative disclosures not only fail to disclose system risks, but, in many cases, also deceptively deny and downplay them. Under the guise of thought leadership and economic expertise, Exxon's energy projections comprise a comprehensive, forward-looking set of expectations about future economic conditions and energy resources. It is among the only energy companies in the world that compile and produce such detailed projections. By design, Exxon's projections are closely watched and credited by investors, analysts, and other market participants.

78. Specifically, the MassAG Complaint identifies a key 2014 publication from Exxon, entitled "Managing the Risks," which it issued to address shareholder concerns regarding the Company's climate risk management. The MassAG Complaint notes that Exxon's claims in that publication that "we are confident that none of our hydrocarbon reserves are now or will become 'stranded'" and "producing these assets is essential to meeting growing energy demand worldwide" fail to adequately disclose the risk that climate change poses to Exxon's business,

based on Exxon's own internal projections it had been developing since the 1970s. The MassAG Complaint also takes umbrage with Exxon's claims regarding the potential for renewable energy to displace fossil fuels through 2040 in stating that "renewable sources, such as solar and wind, despite very rapid growth rates, cannot scale up quickly enough to meet global demand growth while at the same time displacing more traditional sources of energy."

79. The 2014 "Managing the Risks" publication is also alleged to be false and misleading in concluding that risks to Exxon's business from policy responses to climate change are "highly unlikely" because:

[T]he scenario where governments restrict hydrocarbon production in a way to reduce [greenhouse gas] emissions 80 percent during the Outlook period [through 2040] is highly unlikely. The Outlook demonstrates that the world will require all the carbon-based energy that ExxonMobil plans to produce during the Outlook period. Also . . . we do not anticipate society being able to supplant traditional carbon-based forms of energy with other energy forms, such as renewables, to the extent needed to meet this carbon budget during the Outlook period[.]

* * *

[W]e do not believe a scenario consistent with reducing [greenhouse gas] emissions by 80 percent by 2050, as suggested by the "low carbon scenario," lies within the "reasonably likely to occur" range of planning assumptions, since we consider the scenario highly unlikely[.]

* * *

[T]he company does not believe current investments in new reserves are exposed to the risk of stranded assets, given the rising global need for energy[.]

80. The MassAG Complaint argues that Exxon's efforts constitute a sophisticated, global, multi-decade effort to influence financial markets, and the Company's shareholders and prospective shareholders in particular, to credit Exxon's representations about climate change and its risks and accept Exxon's supposed expert conclusions about energy trends and Exxon's self-serving global energy demand projections. As alleged in the MassAG Complaint, Exxon ignores the systemic risks to the fossil fuel industry presented by sudden or dramatic changes to the industry's economic health. As in the thermal coal mining and coal-fired electric generation industries in the United States, where coal consumption was 44% lower in 2018 than its 2007 peak, a dramatic shift away from other fossil fuels could severely limit investment, underwriting, and insurance for these industries. Further, Exxon has completely discounted the calamitous costs imposed by climate change, including in countries, like India, that are already experiencing devastating climate change impacts and so are unlikely to turn to fossil fuels to sustain economic growth.

The Securities Action

81. The Company, along with Defendants Tillerson and Swiger, also currently faces a securities class action, filed in the U.S. District Court for the Northern District of Texas and captioned *Ramirez Jr. v. Exxon Mobil Corp.*, No. 3:16-cv-03111-K ("Securities Action"). On August 14, 2018, U.S. District Judge Kinkeade denied Exxon's motion to dismiss because the amended complaint

sufficiently alleged that the Company issued material misstatements regarding: (i) its use of proxy costs of carbon in its investment and business decisions; (ii) the value of its Rocky Mountain dry gas operations in 2015, which was impaired due to falling commodity prices; (iii) the profitability of its bitumen reserves in Canada, which were operating at a loss for three months; (iv) the profitability of its Kearl reserves, which were no longer expected to generate sufficient revenue to recover project costs and would therefore be debooked by the end of fiscal 2016; and (v) the proxy cost of carbon used in internal strategic decisions, which was significantly higher than publicly reported.

DAMAGES TO THE COMPANY

82. The Individual Defendants' misconduct and breaches of their fiduciary duties have severely damaged the Company's reputation and goodwill, negatively impacted the Company's competitive position, negatively impacted the Company's financial position, exposed the Company to potentially massive liability arising from lawsuits and investigations, and has imperiled the Company's future projects.

DERIVATIVE AND DEMAND ALLEGATIONS

83. Plaintiff brings this action derivatively in the right and for the benefit of Exxon to redress the breaches of fiduciary duty and other violations of law committed by the Individual Defendants, as alleged herein.

84. Plaintiff will adequately and fairly represent the interests of Exxon and its stockholders in enforcing and prosecuting the Company's rights, and Plaintiff has retained counsel experienced in prosecuting this type of derivative action. Plaintiff has continuously held Exxon stock throughout the Relevant Period and will continue to hold Exxon stock through the resolution of this action.

85. On November 2, 2018, Plaintiff, through its counsel, made a demand on the Board to commence this action (the "Demand"). In the Demand, Plaintiff demanded that the Board take the following action:

(a) pursue full corrective action, including commencing legal proceedings for claims of securities and other fraud, breach of fiduciary duty, unjust enrichment, and corporate waste against any current and former directors, officers, or employees who have been responsible for the harm described herein, including the following directors and officers who violated their fiduciary duties to the Company:

- 1) Rex W. Tillerson;
- 2) Mark W. Albers;
- 3) Andrew P. Swiger;
- 4) Donald D. Humphreys;
- 5) Michael J. Dolan;
- 6) Darren W. Woods;
- 7) Jack P. Williams; and

(b) implement corporate governance reforms designed to address and prevent future instances of the wrongdoing described herein.

86. Counsel for Exxon responded to Plaintiff's Demand on November 12, 2018, representing that the Company had designated a group of three purportedly outside directors to oversee an "in-depth review" of the allegations in the Demand. Counsel for Exxon also represented that the review would include monitoring of the trial of the action brought by the New York Attorney General, which was expected to take place in 2019. The Company did not represent that it would take any other action in response to the Demand.

FIRST CLAIM FOR RELIEF
(Against the Individual Defendants for Breach of Fiduciary Duty)

87. Plaintiff incorporates by reference and realleges each and every allegation contained above as though fully set forth herein.

88. Defendants each owe Exxon and its stockholders the highest fiduciary duties of loyalty, good faith, fair dealing, due care, candor, and oversight in managing and administering the Company's affairs.

89. Defendants knowingly, intentionally, and fraudulently violated and breached their fiduciary duties of good faith, fair dealing, loyalty, due care, candor, and oversight as a result of the misconduct described above.

90. The Individual Defendants have a duty to the Company and its stockholders to establish and maintain adequate internal controls to ensure the Company was operated in a prudent and lawful manner. The Individual Defendants have an affirmative obligation to maintain an internal control system to uncover

wrongdoing and to act when informed of wrongdoing. Moreover, the Individual Defendants have an obligation to ensure that at all times, the Company, its officers, and its directors act in compliance with the law, as detailed herein.

91. The Individual Defendants engaged in a sustained and systematic failure to properly exercise their fiduciary duties. Among other things:

(a) Individual Defendants breached their fiduciary duties by failing to ensure that Exxon had adequate internal controls, risk management procedures, and other policies in violation of federal and state laws and regulations and Exxon's Corporate Governance Guidelines; and

(b) Individual Defendants breached their fiduciary duties by violating the Company's Corporate Governance Guidelines, Code of Business Ethics, and other duties required of Board members, as set forth in the Audit Committee Charter, Articles of Incorporation, and other corporate governance documents.

92. The Individual Defendants each knowingly, intentionally, or fraudulently approved the issuance of false statements that misrepresented and failed to disclose material information concerning the Company in violation of their fiduciary duties. These actions could not have been a good faith exercise of prudent business judgment to protect and promote the Company's corporate interests.

93. As a direct and proximate result of the Individual Defendants' breaches of their fiduciary duties, Exxon has sustained significant damages, including damages to its stock price and market capitalization, and suffered damage to its corporate image and goodwill. Damages also include, among other things, the cost of defending Exxon against two related civil lawsuits brought by the states of New York and Massachusetts and the stockholder class action lawsuit alleging securities fraud. As a result of the misconduct alleged herein, the Individual Defendants are liable to the Company and their continuing violations of duty should be enjoined.

SECOND CLAIM FOR RELIEF
(Against the Individual Defendants for Waste of Corporate Assets)

94. Plaintiff incorporates by reference and realleges each and every allegation contained above as though fully set forth herein.

95. By their wrongful acts and omissions, the Individual Defendants were unjustly enriched at the expense, and to the detriment, of Exxon and its stockholders.

96. The Individual Defendants were unjustly enriched for years as a result of compensation, stock options, stock awards, executive bonuses and directors' fees, and other remuneration they received while breaching their fiduciary duties owed to the Company.

97. Plaintiff, as a stockholder and representative of Exxon, seeks restitution from the Individual Defendants and an order from this Court disgorging all profits,

benefits, stock options, stock awards, and other compensation obtained by the Individual Defendants from their wrongful conduct and fiduciary breaches.

98. Plaintiff, on behalf of Exxon, has no adequate remedy at law.

THIRD CLAIM FOR RELIEF
(Against the Individual Defendants for Unjust Enrichment)

99. Plaintiff incorporates by reference and realleges each and every allegation contained above as though fully set forth herein.

100. The Individual Defendants owed and owe fiduciary duties to the Company to disclose material information to the Company's shareholders and refrain from using non-public material information in connection with trading their personal holdings of Exxon stock.

101. The Individual Defendants knew and understood, but concealed, the following non-public material facts: (i) Exxon's use of a "proxy cost" for both its cost projections and product demand, pricing, and revenue estimates failed to take into account internal knowledge about greenhouse gas emissions and climate change, and so failed to meaningfully or accurately influence the Company's disclosures regarding these metrics; (ii) Exxon also failed to accurately disclose the proxy cost of carbon used in internal strategic decisions, which was significantly higher from the proxy costs publicly reported; (iii) Exxon failed to disclose the risk that a large portion of its purported assets were and are subject to a significant risk that they will be "stranded" because the world cannot support the burning of all of

the fossil fuels Exxon claims as assets without undergoing catastrophic climate change; (iv) Exxon failed to disclose that it employed a broad strategy of deceptive communications in its climate risk disclosures in asserting that Exxon has accounted for and is responsibly managing climate change risks and that in any event, they pose no meaningful threat to the Company's business model, its assets, or the value of its securities; (v) Exxon failed to disclose and, in fact, affirmatively denied the numerous systemic risks that climate change presents to the global economy, the world's financial markets, the fossil fuel industry, and ultimately ExxonMobil's own business; (vi) Exxon failed to accurately disclose the value of its Rocky Mountain dry gas operations in 2015, which was impaired due to falling commodity prices; (vii) Exxon failed to accurately disclose the profitability of its bitumen reserves in Canada, which were operating at a loss for three months; (viii) Exxon failed to accurately disclose the profitability of its Kearl reserves, which were no longer expected to generate sufficient revenue to recover project costs and would therefore be debooked by the end of fiscal 2016; and (ix) that as a result of the foregoing, Exxon's positive statements about its business, operations, and prospects were materially misleading and/or lacked a reasonable basis.

FOURTH CLAIM FOR RELIEF
**(Against the Class Action Defendants for Contribution Under
§§10(b) and 21D of the Exchange Act)**

102. Plaintiff incorporates by reference and realleges each and every allegation contained above as though fully set forth herein.

103. The Class Action Defendants, along with the Company, are all named-defendants in the Securities Action, which alleges that the Company and Class Action Defendants violated §§10(b) and 20(a) of the Exchange Act.

104. If the Company is found liable for violating the aforementioned federal securities laws, the Company's liability will be a direct result of the intentional, knowing, or reckless acts or omissions of some or all of the Class Action Defendants.

105. As directors and officers of Exxon, the Class Action Defendants had the power and/or ability to, and did, directly or indirectly control or influence the Company's general affairs, including the content of public statements about Exxon and had the power and/or ability directly or indirectly to control or influence the specific corporate statements and conduct that violated §10(b) of the Exchange Act and SEC Rule 10b-5 promulgated thereunder.

106. Moreover, the Class Action Defendants, themselves, are liable under §10(b) of the Exchange Act, pursuant to which there is a private right of action for contribution, and §21D of the Exchange Act, which governs the application of any private right of action for contribution asserted pursuant to the Exchange Act.

107. Thus, the Company is entitled to all appropriate contribution or indemnification from the Class Action Defendants.

FIFTH CLAIM FOR RELIEF
**(Against the Class Action Defendants for Violations of
§29(b) of the Exchange Act)**

108. Plaintiff incorporates by reference and realleges each and every allegation contained above as though fully set forth herein.

109. The Class Action Defendants, along with the Company, are all named-defendants in the Securities Action, which alleges that the Company and Class Action Defendants violated §§10(b) and 20(a) of the Exchange Act during the time they entered into contracts with Exxon regarding their compensation.

110. Section 29(b) of the Exchange Act provides equitable remedies that include, among other things, provisions allowing for the voiding of contracts where the performance of the contract involved violation of any provision of the Exchange Act.

111. The Class Action Defendants violated provisions of the Exchange Act while performing their duties arising under various employment and other agreements they entered into with Exxon.

112. Exxon was, and is, an innocent party with respect to the Exchange Act violations of the Class Action Defendants.

113. Plaintiff, on behalf of Exxon, seeks equitable remedies in the form of injunctive relief barring these Class Action Defendants from asserting breach of contract by Exxon in any action by Plaintiff on behalf of Exxon to return compensation from these Class Action Defendants.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff seeks the following relief:

- A. A finding that Defendants breached their fiduciary duties;
- B. An award against all of the Individual Defendants, and in favor of the Company, for the amount of all damages sustained by Exxon as a result of the Individual Defendants' breaches of fiduciary duties and unjust enrichment, including any and all damages compensable by statute and/or law, as well as disgorgement of all profits, benefits, and other compensation that the Individual Defendants obtained because of the misconduct alleged herein, together with pre- and post-judgment interest;
- C. An order directing that Exxon take necessary actions to enhance the Company's governance to comply with applicable laws and to protect itself, its employees, and its stockholders from repeating the harms described herein;
- D. Equitable relief in the form of an injunction barring the Class Action Defendants from asserting breach of contract against Exxon;

E. Awarding to Plaintiff the costs and disbursements of the action, including reasonable attorneys' fees and expenses; and

F. Granting such other and further relief as the Court deems just and proper.

JURY DEMAND

Plaintiff demands a trial by jury.

DATED this 2nd day of December, 2019.

**SCOTT+SCOTT
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*Counsel for Plaintiff City of Birmingham
Retirement and Relief System*

UNITED STATES DISTRICT COURT

DISTRICT OF NEW JERSEY

CITY OF BIRMINGHAM RETIREMENT)
AND RELIEF SYSTEM, Derivatively on)
Behalf of EXXON MOBIL CORPORATION,)

Plaintiff,)

v.)

REX W. TILLERSON, MARK W. ALBERS,)
ANDREW P. SWIGER, DONALD D.)
HUMPHREYS, MICHAEL J. DOLAN,)
DARREN W. WOODS, and JACK P.)
WILLIAMS,)

Defendants,)

– and –)

EXXON MOBIL CORPORATION,)

Nominal Defendant)

**VERIFICATION OF JAMES D. LOVE ON BEHALF OF CITY OF
BIRMINGHAM RETIREMENT AND RELIEF SYSTEM**

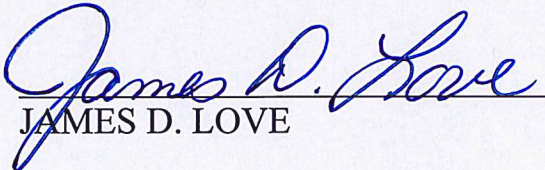
I, James D. Love, make this declaration and, being duly sworn, depose and
say:

1. I am Assistant City Attorney and Fund Counsel for, and duly authorized
to act on behalf of, the City of Birmingham Retirement and Relief System
("Birmingham"), derivative plaintiff in this action. I verify that I have reviewed the

Verified Stockholder Derivative Complaint (the "Complaint") to be filed in this action and that the facts stated in the Complaint, as they concern Birmingham, are true to my personal knowledge. I believe the facts pleaded in the Complaint on information and belief or investigation of counsel are true.

2. Birmingham has not received, been promised or offered, and will not accept, any form of compensation, directly or indirectly, for prosecuting this action or serving as a representative party in this action except: (i) such fees, costs, or other payments as the Court expressly approves to be paid to Birmingham; or (ii) reimbursement, by its attorneys, of actual and reasonable out-of-pocket expenditures incurred directly in connection with the prosecution of this action.

3. I hereby declare under penalty of perjury that the foregoing is true and correct.


JAMES D. LOVE

SWORN TO AND SUBSCRIBED

Before me this 22nd day of November, 2019


NOTARY PUBLIC